



March 17, 2021

Mr. Austin F. Callwood, Director
Division of Environmental Protection
Department of Planning & Natural Resources
45 Mars Hill
Frederiksted, V.I. 00840-4474

SUBJECT: No. 8 Flare H₂S Exceedance – March 10, 2021 and March 11, 2021

Dear Mr. Callwood:

This letter is submitted in compliance with Condition No. 2.4.5.1 of Limetree Bay Title V permit as a follow-up to the email notifications to Ms. Verline Marcellin of the Division of Environmental Protection on March 10, 2021 at 7:49 PM and March 11, 2021 at 9:14 AM regarding the H₂S exceedances at the No. 8 Flare.

The Continuous Emissions Monitoring System (CEMS) recorded H₂S concentrations in the No. 8 Flare in excess of 0.1 gr/dscf (162 ppm) based on a 3-hr rolling average (ref. Title V permit condition 3.2.5.5 & 3.2.5.6) on March 10th and 11th, 2021.


The following table provides 3-hr H₂S concentrations at the No. 8 Flare during the exceedance events.

Source			Source			Source		
Parameter		FLARE08	Parameter		FLARE08	Parameter		FLARE08
Unit		H2SPPMD (PPM)	Unit		H2SPPMD (PPM)	Unit		H2SPPMD (PPM)
03/10/21	16:00	94.4	03/10/21	23:00	132.6	03/11/21	06:00	191.0
03/10/21	17:00	154.5	03/11/21	00:00	133.1	03/11/21	07:00	241.2
03/10/21	18:00	202.2	03/11/21	01:00	131.7	03/11/21	08:00	277.4
03/10/21	19:00	201.5	03/11/21	02:00	129.1	03/11/21	09:00	275.8
03/10/21	20:00	166.0	03/11/21	03:00	128.6	03/11/21	10:00	218.7
03/10/21	21:00	127.6	03/11/21	04:00	129.7	03/11/21	11:00	145.8
03/10/21	22:00	127.7	03/11/21	05:00	144.5	03/11/21	12:00	73.8

During the commissioning of the pressure swing absorption hydrogen makeup system (PSA), the off gases from the PSA routed to the No. 2 LP Gas Recovery Unit (2GRU) caused a high-pressure at the 2GRU. As a result, the 2GRU compressor, C-4850C, tripped several times on the evening of March 10, 2021 and the 2GRU compressor, C-4850A, tripped on the morning of March 11, 2021 both due to high suction pressure. Consequently, in both instances, the pressure relief valve at the compressor suction knockout drum (D-4851) lifted causing elevated H₂S values at the No. 8 Flare. Operations shutdown the PSA unit, which in turn stabilized the 2GRU.

If you have any questions or need additional information, please contact Maria Aloyo at (340) 692-3781.

Sincerely,


Robert Weldzius
Senior Vice President, Refining
Limetree Bay Refining, LLC

Electronic copy: Verline Marcellin (DPNR)